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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,354	06/15/2000	George Mentrup	*	9313
75	590 05/10/2004	EXAMINER		
SHUGHART	THOMSON & KILI	ZAND, KAMBIZ		
Twelve Wyand	otte Plaza			
120 W. 12th Street			ART UNIT	PAPER NUMBER
Kansas City, MO 64105			2132	
		DATE MAILED: 05/10/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
•	09/595,354	MENTRUP ET AL.				
Office Action Summary	Examiner	Art Unit				
	Kambiz Zand	2132				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 26 A	pril 2004.					
·— ·	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 4-19 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 7-10 and 13-19 is/are allowed. 6) Claim(s) 4-6,11 and 12 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 26 April 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

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DETAILED ACTION

1. The text of those sections of Title 35,U.S.Code not included in this section can be found in the prior office action.

- The prior office actions are incorporated herein by reference. In particular, the observations with respect to claim language, and response to previously presented arguments.
- 3. Acknowledgment is made of claim for domestic priority under 35 U.S.C. § 119 (e) (to a provisional application number 60/139,279).
- 4. Claims 1-3 have been cancelled.
- 5. Claims 5-11, 14, 15 and 17 have been amended.
- 6. Claims 4-19 are pending.
- Examiner withdraws objection to the drawings and specification due to correction by the applicant.
- 8. Examiner withdraws objections of claims 5, 6, 8, 11, 14, 15 and 17 due to correction by the applicant.

Response to Arguments

9. Applicant's arguments filed 05/06/04 have been fully considered but they are not persuasive with respect to claims 4-6 and 11-12.

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As per Applicant's arguments that Vlarr do not disclose "recording said master word on said encryption sheet" and " "recording said data word along a data line of boxes", Examiner refers Applicant to the following remarks:

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• Examiner considers recording in an electronic environment as storing data in a memory storage device such as a memory or a memory within a slide or a device. Fig.1-3 and col.2, lines 3-65 clearly disclose storing digital data that is considered as master word or data word. For example col.2, lines 43-47 disclose storing on a disk or slide. Lines 52-55 disclose the cover elements are printed on a grid where cover elements are characters or numbers (see lines 43-51 of col.2). those characters and numbers are considered as master word or data word and where the master code is considered as encrypted data code (see line 3-11 of col.2).

Claim Rejections - 35 USC § 102

10. Claims 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Vlarr (5,321,755 A) recited in the IDS (paper number 5).

As per claim 4 Vlarr (5,321,755 A) teach a method for encryption and retrieving a data word having a data sequence of data characters using a two dimensional grid of boxes on an encryption sheet and comprising the steps of:

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a) selecting a master word having a known master sequence of master characters (see fig.2; col.2, lines 3-11 where the encrypted characters are the master code of the Applicant);

- b) recording said master word on said encryption sheet in a scrambled sequence of said master characters other than said master sequence along a master line of said boxes of said grid (see col.2, lines 3-65 where in line 62-66 disclose the corresponding relationship between set of characters and the number of subdivision where the other encrypted characters are disclosed);
- c) recording said data word along a data line of boxes of said grid in said scrambled sequence by a fixed geometric offset of each of said data characters to at least one of said master characters (see fig.1-3 where the offset represented by the characters in represented by X in comparison with other grid boxes that represent other characters in either row or col. of the item 1 or 5); and
- d) retrieving said data word by finding said master characters in said scrambled sequence and locating said data characters by reference to said fixed geometric offset of said data characters respectively to said master characters in said scrambled sequence (see col.3, lines 52-57 and col.4, lines 1-2 where the decoding or retrieving of the code being done in relationship with the offset value which is represented by the index marker that is aligned with each successive letter).

As per claims 5 and 6 Vlarr (5,321,755 A) teach a method as set forth in claim 4 and including the steps of: establishing said fixed geometric offset between each master

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character and a selected plurality of data characters and establishing said fixed geometric offset between a selected plurality of master characters and each data character (see col.2, lines 53-65 where each grid allows a separate number to be encrypted and therefor different combination of master code characters and data characters are present since the offset value is being able to change constantly based on the different grid's encryption algorithm with respect to characters and numbers).

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Claim Rejections - 35 USC § 103

11. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vlarr (5,321,755 A) recited in the IDS (paper number 5) in view of Mosley (5,251,259) recited in the IDS (paper number 5) by Applicant.

As per claims 11 and 12 Vlarr teach all limitations of the claims as applied in the claim 4 above but do not disclose explicitly providing a magnetic strip on said encryption sheet and recording a machine readable sequence independent of said data word and said master word. However Mosley teach providing a magnetic strip on said encryption sheet and recording a machine readable sequence independent of said data word and said master word (see col.3, lines 4-43 where the magnetic strip on encryption sheet is provided and where by scanning the stripe through a scanner that is machine readable device where a sequence such as PIN or number keys which is independent from the master word and data word the information is authenticated). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize

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Mosely's magnetic stripe machine readable onto Vlarr's encryption sheet within a geometric grid positioned on a device in order to have credit card or similar type smart card's authentication and process by adding different PINs that are being used in specific sequence changing each calendar day and therefore creating different security layers.

Allowable Subject Matter

12. Claims 7-10 and 13-19 are allowed.

13. The following is an examiner's statement of reasons for allowance:

Vlarr (5,321,755 A) teach a method for storing and encrypting one or more sequences of characters within a geometric grid positioned on a device, comprising; choosing a master code sequence of characters;

placing said master code sequence of characters within said geometric grid so that the correct order of said characters is not readily apparent;

selecting one sequence of characters representing information to be stored and encrypted; and

placing said sequence of characters within said geometric grid such that the correct order of said sequence is not readily apparent and such that the location of each character of said sequence in the geometric grid has a predetermined relationship to

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the location of at least one character of said master code sequence of characters in contrast with specific steps of Applicant's invention where providing a sleeve sized and shaped to receive said encryption sheet therein, where said sleeve having an outer end and a character window positioned in a selected fixed geometric relationship to said outer end; and selecting a master word having a known master sequence of master characters; and recording said master word on said encryption sheet in a scrambled sequence of said master characters other than said master sequence along master line of said boxes of said grid; and recording said master word along a data line of boxes of said grid in said scrambled sequence by a fixed geometric offset of each characters to at least one of said master characters by aligning said outer end of said sleeve with a master character and recording a data character on said encryption sheet through said character window to establish said fixed geometric offset; and retrieving the data word by finding said master characters in said scrambled sequence and locating data characters by reference to said fixed geometric offset of said data characters respectively to said master characters in said scrambled sequence by aligning said outer end of said sleeve with each master character and reading a corresponding data character through said character window as recited in independent claims 7-10 and 13.

14. Dependent claims 14-19 are allowable as being dependent upon Independent claim 13 and having additional allowable features therein.

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Conclusion

15.**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (703) 306-4169. The examiner can normally reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned as (703) 872-9306. Information regarding the status of an application may be obtained from the Patent Applications Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available

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through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kambiz Zand

05/06/04

GILBERTO BARRON

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100